PROJECT NUMBER: 1503
PROJECT TITLE: Modified Smoking Materials
PROJECT LEADER: J. G. Nepomuceno
PERIOD COVERED: October, 1987

I. FOAMED FILLER BINDER

A. **Objective**: To develop a process for applying a subjectively acceptable foamed binder to the tobacco filler during making to improve cigarette coal strength, reduce loose ends, increase firmness and allow for weight reductions.

B. **Results**: The degraded pectin received from Grindsted, Inc. (TSP-095) was applied to Cambridge Lights cigarettes at a 1.0% addition rate using a 35% degraded pectin solution. Results to date show that this binder is matching the performance of the pectin binders developed in-house. Additional testing is in progress to establish the effects of tobacco OV adjustment on pack firmness. Cigarettes with this binder system are currently being evaluated by our internal panels. Degraded pectin binders prepared via the pilot scale continuous degradation unit were also evaluated this month on Cambridge Lights cigarettes. Results show that these binders are also matching the performance of the binders prepared via the lab scale batch process.

C. **Plans**: Complete evaluation of the pectin samples from Grindsted including the subjective evaluation of these prototypes. Establish whether firmness improvements demonstrated to date warrant the initiation of mail-out testing with these prototypes.

II. ENGINEERING SUPPORT:

A. **Objective**: Provide technical support to Engineering during the factory implementation of the menthol in foil program.

B. **Results**: Experiments to determine the level of ethanol in the pack 12 hours after packing were conducted in support of the menthol in foil program implementation. In addition, ethanol permeability studies through the plastic bags were conducted. Results from these studies were used to track the fate of the ethanol from application to 12 hour old packed product. The ethanol was applied along with the menthol.

C. **Conclusions**: Results show that a major portion of the ethanol applied to the bobbin during the menthol application step is lost at the packer. These results have been verbally communicated to Engineering and a report has been written.

2001117580

Source: https://www.industrydocuments.ucsf.edu/docs/qmgm0000